

(12) **United States Patent**
Staples

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- (54) **BICYCLE SPROCKET FOR USE WITH A MULTI-GEAR REAR CASSETTE**
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- (58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

A rear bicycle sprocket for use with a multi-gear rear cassette is provided. The sprocket includes a chain engaging portion and a mounting portion having generally annular shape about a central axis and a plurality of support arms, integrally formed with the chain engaging portion and with the mounting portion. The sprocket further includes a plurality of space maintaining protrusions, each space maintaining protrusion extending axially forwardly from an axially forward surface of a corresponding support arm and integrally formed therewith. A multi-gear rear cassette having a plurality of sprockets coaxially mounted together wherein the plurality of sprockets includes the rear bicycle sprocket mounted axially rearmost and a bicycle including the multi-gear rear cassette are further provided.

20 Claims, 8 Drawing Sheets

